Title (en)

Method for manufacturing semiconductor device.

Title (de)

Verfahren zur Herstellung einer Halbleiteranordnung.

Title (fr)

Procédé pour la fabrication d'un dispositif semi-conducteur.

Publication

EP 0431522 B1 19950215 (EN)

Application

EP 90123107 A 19901203

Priority

JP 31515689 A 19891206

Abstract (en)

[origin: EP0431522A2] A method for manufacturing a semiconductor substrate device having a non-volatile memory cell region (10) and a logic region (11) including MOS transistors. A first insulating film (23) and a first electrode layer (24) are formed on a semiconductor substrate (22). Only those portions of the first insulating film (23) and first electrode layer (24) which are located in the logic region (11) are removed, without removing those portions of the first insulating film (23) and first electrode layer (24) which are located in the non-volatile memory cell region (10). A sacrificial film (25) is deposited for insulation over the entire surface of the memory cell region (10) and logic region (11), and then a resist film (26) is coated on the sacrificial film (25). Subsequently, impurity ions are implanted into a desired channel region (27) located in the logic region (11). The resist film (26) and sacrificial film (25) are removed, and thereafter a second insulating film and a second electrode layer are formed.

IPC 1-7

H01L 21/82

IPC 8 full level

H01L 21/82 (2006.01); **H01L 21/8234** (2006.01); **H01L 21/8247** (2006.01); **H01L 27/088** (2006.01); **H01L 27/115** (2006.01); **H01L 29/788** (2006.01); **H01L 29/792** (2006.01)

CPC (source: EP KR US)

H01L 21/82 (2013.01 - EP US); **H10B 41/40** (2023.02 - EP US); **H10B 41/46** (2023.02 - EP US); **H10B 69/00** (2023.02 - EP US); H01L 21/82 (2013.01 - KR); Y10S 148/138 (2013.01 - EP US)

Cited by

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DOCDB simple family (publication)

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DOCDB simple family (application)

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